

Title (en)  
Metallic cylinder head gasket

Title (de)  
Metallische Zylinderkopfdichtung

Title (fr)  
Joint de culasse métallique

Publication  
**EP 0747614 B2 20030115 (DE)**

Application  
**EP 96108048 A 19960521**

Priority  
DE 19520695 A 19950607

Abstract (en)  
[origin: DE19520695C1] The gasket contains an inner deformation limiter (9). The side of the limiter facing the combustion chamber passage (3) has rounded-off edges facing the cover plates (2) for the seals, with radii, which prevent high edge pressures. The limiter has a spherical surface on at least one side. On the side away from the spherical one, the limiter has an additional folded section on an intermediate plate, in the passage area of the combustion chamber. The intermediate plate is inserted between the cover plate and the carrier plate (1).

IPC 1-7  
**F16J 15/08**

IPC 8 full level  
**F02F 11/00** (2006.01); **F16J 15/08** (2006.01)

CPC (source: EP KR US)  
**B21K 23/00** (2013.01 - EP KR US); **F02F 11/002** (2013.01 - EP KR US); **F16J 15/0825** (2013.01 - EP US); **F02F 2001/104** (2013.01 - EP US); **F16J 15/0825** (2013.01 - KR); **F16J 2015/0843** (2013.01 - EP KR US); **F16J 2015/085** (2013.01 - EP US); **F16J 2015/0862** (2013.01 - EP US); **Y10T 29/49297** (2015.01 - EP US); **Y10T 29/49826** (2015.01 - EP US); **Y10T 29/49908** (2015.01 - EP US)

Citation (opposition)  
Opponent :

- JP H0415372 A 19920120 - NIHON METAL GASKET
- EP 0533357 A1 19930324 - NIPPON GASKET KK [JP]
- JP S62224772 A 19871002 - NIHON METAL GASKET
- WO 9638684 A1 19961205 - COOPERS PAYEN LTD [GB], et al
- JP S6448838 U 19890327

Cited by  
CN109014795A; DE10015604C2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**DE 19520695 C1 19960704**; BR 9505566 A 19971104; CN 1085298 C 20020522; CN 1137606 A 19961211; DE 59604727 D1 20000427; EP 0747614 A1 19961211; EP 0747614 B1 20000322; EP 0747614 B2 20030115; KR 100300288 B1 20011122; KR 970002048 A 19970124; US 5695200 A 19971209; US 5875548 A 19990302; US 6148516 A 20001121

DOCDB simple family (application)  
**DE 19520695 A 19950607**; BR 9505566 A 19951129; CN 95120016 A 19951130; DE 59604727 T 19960521; EP 96108048 A 19960521; KR 19950045857 A 19951130; US 13813998 A 19980821; US 56510895 A 19951130; US 86769497 A 19970604